Attachment A

# Automated Function Descriptions

CERTIFICATION FUNCTIONS

*Background:* To be certified for WIC, applicants must be categorically eligible, meet the program's residency and income requirements, and be determined by the certifying official to be at nutritional risk. Most participants who are certified for WIC are generally recertified at 6-month intervals. In assessing an individual's health risk, bloodwork is analyzed, height and weight measurements are taken, and food the participant routinely consumes is usually analyzed. There are over 100 possible codes from which participants may be determined eligible based on nutritional risk. The certifying official records the health and/or nutrition-related condition(s) for which eligibility was determined in the participant's file. When funds are insufficient to serve all applicants, the State agency is required to prioritize participants in accordance with program regulations.

*Functional Descriptions:*

**1. Certification Periods:** The system automatically calculates the date the certification is due to expire for each participant. The system does this by adding the appropriate number of days to the certification date that is captured in the system during certification.

**2. Nutritional Risk and Priority Status:** Based on the nutrition and health information entered into the system by the certifying official, and the priority system established by Program regulations, the system assigns the participant a nutritional risk code and assigns a priority level. Where multiple risk factors exist, the system stores risk factors for each participant and assigns the highest applicable priority. At the State agency's discretion, the certifying official may override the code generated by the system.

**3. Income Eligibility:** Based on the information provided by applicants and established income eligibility guidelines, the system calculates the applicant's income and flags individuals whose income exceeds program standards. For those determined to be eligible, the system automatically stores the information in the participant's certification record. Where the applicant is determined eligible based on adjunctive income eligibility, this information is also stored on the system.

**4. Associate Family Members:** Clinic staff enter information that applies to all family members into the system only once. The system automatically updates or modifies the participant records of all associated family members by linking the common family ID. The family ID is used to facilitate coordination of certification periods for family members, transferring families within the system, and food package tailoring when several family members are eligible to receive the full package.

In addition, the system allows the user to print all of the food instruments for all members within a family when the parent or guardian is present for pickup. This is possible because the system is programmed to associate all family members with a family group ID. Upon

command, the computer sorts the FI's by family, grouping instruments for each individual within the family, and prints those FI's associated with the family when they are present for pickup.

**5. Transfer of Certification:** The system enables local staff to easily transfer the participant from one agency to another. To facilitate transfers within the State, the system maintains statewide data on all certified participants. The staff at the participant's new location are able to access the participant's file to find out what foods were issued at the former local agency and when they were last issued as well as other information useful in providing continued health and nutrition-related services.

*Why Automation of This Function Is Important.* Automated systems can be programmed to perform simple repetitive administrative functions as well as complex functions of a routine nature that do not require human judgment. The system capabilities identified here will free WIC staff from repetitive tasks so they can spend more time with clients. In addition, automation of these functions will increase standardization and accuracy of the information entered into the system.

Associating family members within the system has several benefits, including elimination of duplicate data collection and entry of family-based information, ease in transferring families within the system, and better coordination of family-based services. Sorting food instruments by family and by individual within the family saves the family and staff time during food instrument issuance. It enables food instruments to be distributed expeditiously since all food instruments for a whole family are physically printed and grouped together, making for no breaks in distribution.

Ease of transfer within a State promotes continuity of service for participants and avoids wasteful duplication caused by needing to "re-enroll" an individual who was still within a valid certification period.

**6. Electronic Certification Data Transmission:**

*Background:* There are three basic systems or methods for processing client data in a WIC automated system: centralized, distributed, and paper batch. In a centralized system, information is entered on computers at the local level and immediately transmitted "on-line" to the central computer facility. In a distributed system, information is stored and processed on computers at the local level and "batched" for later electronic transmission to the central computer facility. In a paper batch system, information is collected on paper forms at the local or clinic level and sent to the computer facility by mail for clerks to key data into the host computer.

With paper-batch systems, the delay in processing information is significant because of the time it takes to send participant data through the mail. These systems are also paper-intensive, as each data entry form is replaced by an automated printout after the data is entered in the system at the central site. Errors in data entry result in the local agency staff having to submit new data entry forms to correct errors in the system.

*Functional Description:* Participant certification data is sent to the central computer facility electronically either in real time or batched mode. Paper forms are not sent through the mail.

*Why Automation of This Function Is Important:* Program managers need accurate and timely participation information so they can take immediate action to adjust caseload or reduce food package costs when needed to stay within budget. Paper batch systems are slow, cumbersome, and increase the likelihood of error.

BENEFIT DELIVERY FUNCTION

**7. Track Nutrition Education Contacts and Topics Covered:**

*Background:* Program regulations require that during each 6-month certification period, at least two nutrition contacts shall be made available to all participants and that the nutrition education provided be documented in the participant's certification file.

*Functional Description:* The system captures the nutrition education provided to each program participant throughout the certification period as well as nutrition education topics covered during nutrition education training.

*Why Automation of This Function Is Important:* Nutrition education is an important program function and since nutrition education contacts are numerous, tracking encounters is best done via automation. If codes are used to indicate the type of nutrition education provided, e.g., group class or individual counseling on specific topics, States will be able to better assess the most effective ways to provide nutrition education.

Food Prescription Delivery

*Background:* To facilitate the prescription of foods to WIC clients, standard combinations of foods are defined, called food packages, which are structured for each WIC category (e.g., pregnant women, infants, children). The packages developed for each category vary in their food content to address different nutritional requirements. The approved foods included in each package are grouped into food instrument types. Thus, each food package consists of one or more food instrument types. The WIC system should be designed to allow flexibility and professional discretion in the issuance of food packages to participants, while maintaining program integrity and accountability through edits that prevent overissuances. Once the package is prescribed, the participant should receive a food instrument (paper or EBT card).

*Functional Descriptions:*

**8. Create Food Prescription:** The system supports this function by allowing the certifying official to select a food package for issuance to a participant from a table of standard, pre-defined packages. However, the certifying official has the flexibility to alter a standard package or develop a new package from scratch by quickly selecting food items from tables to construct the package. The system is programmed with edits that prevent the user from issuing foods that are disallowed or quantities of food that exceed the regulatory limit based on participant category.

**9. Issue Benefits On-demand:** Printing is done for each participant at the time the participant is present to pick up the food instruments. With this system there is no need to fill out a food instrument by hand or to print any food instruments in advance. The printing of food instruments on demand reflects the most recent food package prescribed for the participant, and may include adjustments to the food package recorded in the system before printing to reflect late pick up of the instruments, as well as other anticipated changes such as category change (i.e., infant to a child). This approach to printing food instruments is also used to reissue food instruments that are lost or stolen from the client.

To support this function, the WIC system prints the food instruments corresponding to the selected participant's food package, identifies the valid period for the instrument, and maintains a record of food instruments issued. Each food instrument issued (with the exception of prorated food instruments) is valid for one month which, depending on state program policy, may be either a calendar month, or a month that starts with the issue date of the instrument. The system also retains internal records of all food instruments issued to support subsequent food instrument reconciliation and provides a complete audit trail.

*Why Automation of This Function Is Important:* Systems need to be designed in a way that enables the local agency or clinic to quickly assign and issue food packages that are nutritionally appropriate for each participant to expedite certification. Built-in edits should be designed to prevent errors and overissuances.

Where food instruments are manually written or printed in advance and sent to the local agency or clinic, there is significant concern regarding security. Without strong controls, food instruments are subject to theft and misuse. In addition, the number of unclaimed and voided food instruments is greater in these systems than in systems where food instruments are printed as participants show up for pickup. There is an associated administrative burden of accounting for these unused food instruments as well. Also in support of on-demand benefit issuance, food package prescriptions can be reviewed and updated at every appointment to ensure the participant is receiving the most appropriate supplemental foods.

**10. Track Referrals to Other Programs:**

*Background:* The WIC Program serves as an adjunct to good health care during critical times of growth and development. During certification the participant is informed of other programs for which she may be eligible to receive benefits.

*Functional Description:* The system captures the name of the programs to which the participant was referred.

*Why Automation of This Function Is Important:* Referral to other programs is an important function of the WIC Program, and automation increases the likelihood it will be accomplished. By capturing the name of programs to which the participant was referred and displaying this information to local staff, the system will enable staff to followup to determine if participants accessed the other programs.

FUNDS MANAGEMENT FUNCTION

## 11. Perform Reconciliation:

*Background:* The purpose of one-to-one reconciliation is to ensure that all food instruments (benefits) used were appropriately issued to an individual certified to participate in the WIC Program. Information is captured in the system for each food instrument issued to a participant. To validate that the person who was issued the food instrument and redeemed the food instrument is certified to receive benefits, the issuance and redemption file must be matched to the file that stores the participant's certification information. All State agencies are required by regulation to perform one-to-one reconciliation and to follow up on all unmatched food instruments.

*Functional Description:* Issuance information includes the name of the participant, the participant's ID, the food instrument serial number, the food package prescribed, the date the food instrument was issued, the date the food instrument expires, and the estimated value of the food instrument. Redeemed food instruments are processed through regular banking channels or through the State payment system for payment to the vendor's account. Each food instrument redeemed is matched with the issuance data maintained in the system, and a monthly report is produced that shows a summary of the disposition of food instruments and expenditures.

The summary shows the number of food instruments redeemed, voided because they expired, were never issued, or because they were replaced; unclaimed because the participant failed to pick up the food instrument at the clinic, issued but unredeemed because the participant failed to redeem the food instrument they received, or unmatched because the serial number did not match with the serial number of the food instrument issued. The unmatched food instruments appear in an exception file, and the State agency must followup on each one to ensure it was properly issued. With the use of on-demand food instrument printing, these unclaimed, voided, and unmatched food instruments are significantly reduced. On-demand benefit issuance enables greater food instrument control and accountability. With this system nearly all food instruments redeemed can be reconciled with issuance information.

*Why Automation of This Function Is Important:* One-to-one reconciliation of all food instruments is required by regulation. Redeemed food instruments are the basis for food expenditures. State agencies are required to account for all expenditures (i.e., all food instruments redeemed). Due to the voluminous amount of data produced through this process monthly, automation is a necessity for sound budget control and accountability.

PROGRAM MANAGEMENT REPORTING FUNCTIONS

## Produce Standard Reports

*Background:* State and local staff routinely need information to adequately perform their jobs. Standard automated reports are a necessity in every area of the program, including but not limited to, funds management, nutrition education, program participation, vendor management, caseload management, and food instrument reconciliation. In addition, reports are necessary for compliance with federal reporting requirements.

*Functional Description(s):*

**12. Dual Participation Reporting:** The local worker has access to statewide data to determine whether a duplicate record exists on an individual who is newly certified for WIC. In an on-line system, the information is available immediately. In a distributed system, preliminary demographic data is recorded in the system. The information is matched against the database periodically to identify clinics where the applicant may already be participating.

Where two separate State agencies operate within a State (e.g., a geographic State agency and an Indian Tribal Organization or WIC and CSFP) the system produces a data tape or an electronic file for exchange. One or both of the State agencies involved perform a participant data match. This information is used to flag possible instances of dual participation for followup action.

**13. The Integrity Profile (TIP):** The WIC system produces report data in accordance with existing specifications, and produce other vendor management reports deemed necessary by the State agency.

**14. Rebate Billing Report(s):** Based on redemption data, the system produces a report that determines the number of cans of formula purchased by brand name and by type, and the month the food instrument was valid for participant use. In addition, the number of full versus partial infant formula packages can be identified. The system also provides rebate billing reports for rebated foods other than formula.

**15. Participation Report(s):** The system produces reports that summarize the number of participants served during a specified time period, e.g., month and for a specified area, e.g., statewide, agency, clinic. This information is used for caseload management and funds management.

**16. Participant Characteristics Datasets:** The system produces a data tape for use in the biennial report to congress on WIC Program and Participant Characteristics.

*Why Automation of These Functions Is Important:* All of these reports are instrumental to integrity efforts and funds control. Because the data is extensive, standard reports are needed which provide summary or exception-based data.

VENDOR MANAGEMENT FUNCTION

**17. Identify Redeeming Vendor:**

*Background:* It is critical that State agencies be able to associate each food instrument redeemed with the redeeming vendor. Typically when a food instrument is redeemed, the redeeming vendor stamps the food instrument with his/her assigned vendor ID number. The WIC staff, bank or contractor enters the food instrument serial number, vendor ID number, and actual redemption amount into the system. Some State agencies are vendor-specific, e.g., they require the client to choose a specific vendor at which to shop. In these State agencies, the vendor number is captured in the system at check issuance.

*Functional Description:* The system is designed to accept basic transaction information pertaining to each authorized retailer either at the time of issuance (i.e., vendor-specific food instruments) or at the time of payment. Transactions are related to the vendor performing the redemption.

*Why Automation of This Function Is Important:* This basic information is needed in order to perform statistical analyses to detect high-risk vendors, to assess overcharges, and to ultimately make payments to the vendor's account. Automation is necessary for most State agencies in order to perform vendor data analyses.

**18. High-Risk Vendor Detection System:**

*Background:* A major function of vendor management is to determine those vendors that, based on their history of participation in WIC, present a high risk of program fraud or abuse. Those vendors flagged by the system are then prioritized for investigation.

*Functional Description:* The system supports this function by flagging high-risk vendors based on suspicious redemption patterns. Vendors are put into peer groups based on characteristics such as size (small, medium, or large based on average monthly redemptions), location (urban versus rural), and type (supermarket, convenience store, independent, pharmacy). At a minimum, the following criteria are used in the analysis of redemption data:

*1. High Mean Value* - Using a woman or children's food package, the system calculates the average food instrument value for each vendor. Each vendor's average is compared with the average value for the peer group, and vendors whose average exceeds the peer group average are flagged for followup action.

*2. Low Variance* - Using a woman or children's food package, the system calculates the average food instrument value for each vendor. Using this average, the system calculates the standard deviation in the vendor's prices based on all of the food instruments redeemed. Vendors with a small amount of variation in food instrument prices are flagged by the system for followup action.

At their discretion, the State agency may use other criteria to flag suspicious vendors. The system automatically assigns a risk designation to each vendor flagged based on the prevalence of risk factors. For example, a vendor flagged on three criteria may be considered high risk, while a vendor flagged on one criterion may be considered non-high-risk or risk may be determined based on a vendor being flagged on one or more of these criteria consistently over several months.

*Why Automation of This Function Is Important:* WIC State agencies must have systems to detect fraud and abuse and target compliance efforts. Some types of vendor fraud result in a loss of funds, while other abuses compromise the objectives of the Program. Because transaction data is voluminous, an automated system is needed to compile the data. Comparison of vendors is also facilitated by automated data reports.

## 19. Price Editing for Excessive Charges:

*Background:* In order to obligate funds, State agencies must estimate the redeemed price of food instruments issued to participants. An estimated value for each food instrument type is determined based on statewide average redemption values from prior months, price lists collected from vendors, bid prices, periodic price surveys, or other methods of obtaining price information.

There are several factors that affect this estimated value. Food prescriptions usually only specify the quantity and type of food to be purchased (i.e., 6 oz. Concentrated juice, 12 oz. Peanut butter, 18 oz. cereal), but within the food types, there are different brands of foods available at different prices. The value of the food instrument varies depending on the size of the container (e.g., 2 quarts of milk may be more expensive than 1 gallon). The price each vendor charges for foods varies depending on the store's prices. Overcharges, intentional or unintentional, may also impact the price WIC pays for food.

*Functional Description:* The system assigns a maximum value for each food instrument type. Once the food instrument is redeemed, the system automatically checks the redeemed price against the maximum value and rejects any food instruments exceeding the maximum amount.

*Why Automation of This Function Is Important:* This function needs to be automated due to the enormous volume of food instruments issued and redeemed daily. Manually matching and flagging food instruments redeemed over the maximum value would be cost prohibitive.

## Future Core Functions

The following additional functions were also identified as essential to automate. However, because of the cost or difficulty of implementation, these functions will be incorporated in State systems at a later date.

**Source of Income – Future Core Function:** The system is used to document the source of income information, i.e., pay stubs, letter from Medicaid, etc.

**Automated Dietary Assessment – Future Core Function:** The foods consumed over a period of time by the participant are entered into the computer and the system automatically assigns a score based on the food's nutrient value. The system automatically flags scores determined to be low.

**Automated Growth Charts – Future Core Function:** Height, weight, and head circumference (for infant) are entered into the system and the system graphically plots the individual's growth and/or provides the nutritionist with the calculated percentiles.

**Point of Certification Data Entry – Future Core Function**

*Background:* When an individual applies for WIC, clinic personnel collect basic eligibility information through interactive interviews with the applicant. Individuals who meet basic requirements are then evaluated by a certifying official who collects health information and determines the individual's nutritional risk. If the individual is determined to be fully eligible, the certifying official determines her food package needs and issues a food instrument(s).

At each "station" within the local agency or clinic, certification data is collected from the participant or derived from the health assessments and this information is captured in the system and maintained in the participant's certification record. In some clinics, the information is first handwritten onto a paper form and sent to another location for data entry. This approach may be taken because not all staff has access to a computer for data entry.

*Functional Description:* The information which makes up the participant's certification record is entered directly onto a computer. Optimally, no information is handwritten on paper for data entry onto the computer at a later time, except for when information is collected off-site (i.e., in a nonpermanent location such as a mobile van or other temporary clinic location) where a computer may not be available.

A computer is readily available to all staff who have a need to enter information into a participant's certification record. This may include staff who collect basic eligibility information; record height/weight measurements, bloodwork, and assess an individual's dietary needs and nutritional risk; track the status of immunizations; record nutrition education received; provide/record referrals to other services; and issue food packages and food instruments. At the State agency's option, the computer could be connected to a printer so a copy of the certification record could be printed out and filed or the file could be maintained electronically. States may also maintain limited documentation in paper files,

such as applicant signatures on rights and responsibility forms and proxy signatures, or may utilize electronic signatures.

*Why Automation of This Function Is Important:* This function requires that all clinic staff doing certifications have computer access (unless it is a remote site and impractical) in order to eliminate handwritten certification form entries. There are several advantages to automating the certification function. First, it streamlines clinic operations as clinic staff can spend less time on paperwork and more time with clients. In addition, it most likely increases the accuracy of the information in the system, as it eliminates the need to handle data twice, once when handwritten and a second time when entered onto the system. Without automated edits, errors can occur at both times. Moreover, the use of handwritten certification entry is highly inefficient because it requires duplicative staff work, which over time, is likely to be more expensive than the cost of computers.

Another advantage of key entering certification data as it is collected is to use automation to assist with eligibility determination. The automated system can interpret information to assess income and categorical eligibility. It can also calculate some nutritional risks such as weight and growth problems and anemia. When used in this way, the automated system can ensure accurate, consistent eligibility determinations and can increase the likelihood that nutrition risk conditions are consistently identified and addressed with education.

**Ad Hoc Reporting – Future Core Function:**

*Background:* State and local WIC Programs collect a vast amount of participant and program data. Program managers need access to the information on an "as needed" basis for a variety of purposes, such as assessing participant health trends, managing caseload, reporting participant characteristics, making program changes, and responding to policy questions. Some types of information are needed at the State agency level, while other information may be needed at the local agency level.

While some State agency systems can do ad hoc reporting, producing reports can be expensive depending on the urgency and the amount of data needed.
Recently, a set of significant new concepts and tools have evolved into a new technology that make it possible to provide all key people within an organization with access to whatever level of information is needed. The term that has come to characterize this new technology is "data warehousing."

*Functional Description:* The system is designed so data can be easily accessed. State agencies archive static information that does not need to be stored on the WIC system but will be needed for future program management. Data systems are designed to store, retrieve and analyze data along a number of dimensions, including but not limited to:

- Caseload management
- Budget forecasting
- Employee and participant fraud detection

*Why Automation of This Function Is Important:* In the WIC Program, information systems generally have taken a back seat to operational systems. Yet having access to accurate and timely information is a necessity for effectively managing a WIC Program. Managers need

to make decisions based on fact rather than intuition. With today's new technologies for accessing databases, every WIC Program should have the capability to obtain needed information.